

# UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

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 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.

 09/699, 466
 10/31/00
 YAMAZAKI
 \$ 0756-2222

DATE MAILED: 09/26/01

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

Application No.  09/699,466  Examiner Tuan H. Nguyen	
Examiner Tuan H. Nguyen  2813  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed effect St(c) MONTHS tome the mailing date of this communication.  • If the period for reply specified above, the maximum statutory period will expire 31K (6) MONTHS tome the mailing date of this communication.  • If the period for reply specified above, the maximum statutory period will expire 31K (6) MONTHS tome the mailing date of this communication.  • If alians to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  • Any reply received by the Cifice later than three months after the mailing date of this communication, even if timely filed, may reduce any searned patent term adjustment. See 37 CFR 1.704(b).  Status  1) ☑ Responsive to communication(s) filed on 06 July 2001.  2a) ☐ This action is FINAL.  2b) ☑ This action is non-final.  3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) ☑ Claim(s) 1-25 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) is/are allowed.  6) ☑ Claim(s) is/are allowed.  6) ☑ Claim(s) is/are rejected.  7) ☐ Claim(s) is/are rejected to.  8) ☐ Claim(s) is/are rejected to by the Examiner.  10 ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).	
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IT) Ine proposed drawing correction filed on is: a) j approved b) disapproved by the Examiner.	
If approved, corrected drawings are required in reply to this Office action.  12) The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. §§ 119 and 120	
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).	
a) All b) Some * c) None of:	
1. Certified copies of the priority documents have been received.	
2. Certified copies of the priority documents have been received in Application No	
3. Copies of the certified copies of the priority documents have been received in this National Stage	
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.	
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application	1).
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.	
Attachment(s)	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)  4) Interview Summary (PTO-413) Paper No(s)  5) Notice of Informal Patent Application (PTO-152)  6) Other:	

Application/Control Number: 09/699,466

Art Unit: 2813

#### **DETAILED ACTION**

## **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-38 of U.S. Patent No. 6,180,439. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to a method for forming a thin film transistor with an active layer having a tapered shaped.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzawa et al..

Suzawa et al., figs. 1-6 and related text on col. 1-9 teaches the claimed method for forming a thin film transistor including the step of forming a semiconductor island 24 having a tapered shape by patterning the semiconductor film 22, the tapered shape having an angle with a range of 30°C to 60°C between the side thereof and the underlying surface (fig. 2A-2C and related text), and crystallizing the semiconductor film by heating.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected a suitable angle for forming a tapered shape island in the process of forming a thin film transistor as suggested by Suzawa et al. for improving the step coverage, withstand voltage at the edge which, in turn, contributes to the characteristics and yields of the TFT.

### Response to Arguments

Applicant's arguments with respect to claims 1-25 have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is 703-308-2550. The examiner can normally be reached on 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Bowers can be reached on 703-308-2417. The fax phone numbers

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for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and # for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Tuan H. Nguyen Primary Examiner Art Unit 2813

TN September 24, 2001